

## **REMARKS**

All of the previously pending claims, i.e., claims 5 and 12-16 have been cancelled and new claims 23-84 have been added in order to expedite prosecution and advance the case towards issuance and in order to more fully protect the entire scope of the present invention. New claims 23-84 are fully supported by the application as filed and add no new matter.

### **I. The Written Description Rejection**

Claims 5 and 12-16 stand rejected under 35 U.S.C. § 112, first paragraph, as allegedly lacking sufficient written description. The Examiner seems to indicate that in order to satisfy the written description requirement the claims must be limited: (a) to bridge molecules that are bispecific monoclonal antibodies; and (b) hepatocellular carcinoma cells, colon carcinoma cells, and gastric cancer cells as the tumor cells.

In order to expedite prosecution and advance the case towards issuance, new claim 23-84 refer to hepatocellular carcinoma, lymphoma, colon carcinoma, or gastric cancer cells and bispecific monoclonal antibodies. In view of the above, Applicant respectfully submits that this issue is now moot.

### **II. The Enablement Rejection**

Claims 5-12 and 16 stand rejected under 35 U.S.C. § 112, first paragraph, as allegedly not being enabled. The Examiner states that the specification is enabling only for specifically listed methods and compositions (see page 4, point 5 of the Office Action).

Applicant respectfully submits that this issue is now moot, as new claims 23-84 refer to compositions and methods which include a CD28 or 4-1BB molecule and gp55, gp95, gp115 and gp210 antigens.

### **III. The Anticipation Rejections**

Claims 5 and 12 stand rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Guo et al. (1997). In addition, claim 12 stands rejected under 35 U.S.C. § 102(b) as allegedly anticipated by Shi et al.

Applicant respectfully traverses to the extent these rejections may be held to apply to new claims 23-84. In order to anticipate a claimed invention, the cited reference must teach each and every limitation set forth in the claim. New claims 23-84 include the limitation from former claim 13 that the antigen presenting cells are selected from the group consisting of dendritic cells, macrophages, and B cells. The cited references fail to teach or suggest this limitation and thus fail to anticipate claims 23-84 for at least this reason. In view of the above, Applicant respectfully requests that the Examiner reconsider and withdraw this rejection.

### **IV. The Obviousness Rejections**

Claims 5 and 12 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable: (a) over Shi et al.; and (b) over U.S. Patent No. 5,484,596 in view of Renner et al. or Bohlen, both in view of admissions in the specification, Darlington et al., Chapoval et al. and Krummel et al., Wang et al. and Vanky et al.

Applicant respectfully traverses to the extent these rejections may be held to apply to new claims 23-84. In order to render a claimed invention obvious, the cited reference must teach or

suggest each and every limitation set forth in the claim. New claims 23-84 include the limitation from former claim 13 that the antigen presenting cells are selected from the group consisting of dendritic cells, macrophages, and B cells. The cited references fail to teach or suggest this limitation and thus fail to render claims 23-84 obvious for at least this reason. In view of the above, Applicant respectfully requests that the Examiner reconsider and withdraw these rejections.

Claims 13-16 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable: (a) over Shi et al. and further in view of Guo et al. (1994) and further in view of Van der Bruggen et al. and Hogan et al.; and (b) over U.S. Patent No. 5,484,596 in view of Renner et al. or Bohlen, both in view of admissions in the specification, Darlington et al., Chapoval et al. and Krummel et al., Wang et al. and Vanky et al. and further in view of Guo et al. (1994 and further in view of Van der Bruggen et al. and Hogan et al. In addition, claims 5 and 12-16 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Guo et al. (1997) in view of Guo et al. (1994) and further in view of Van der Bruggen et al. and Hogan et al.

Applicant respectfully traverses to the extent that this rejection may be held to apply to new claims 23-84. The above rejections were based in part on the Examiner's statement that one skilled in the art at the time of the invention would have been motivated to replace the tumor cells of the primary reference with B cells in order to provide a more efficient antigen presenting cell for cancer immunotherapy, to eliminate the need for cytokine pretreatment of the tumor cells and to eliminate the need for irradiation inactivation of the tumor cells. However, the Examiner's reasoning with respect to replacing tumor cells with B cells fails to provide a motivation to modify the cited references in a manner that would yield the invention of claims 23-84, which related to the use of macrophages and dendritic cells, rather than B cells.

In view of the above, Applicant respectfully requests that the Examiner reconsider and withdraw these rejections.

**CONCLUSION**

Applicant believes that this Response will now place the application in condition for allowance. If the amount enclosed is incorrect, please charge or credit Baker & McKenzie Deposit Account No. 02-0410 in the appropriate amount. Should any issues remain unresolved, the Examiner is invited to telephone the undersigned.

Respectfully submitted,



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## **VERSION WITH MARKINGS TO SHOW CHANGES MADE**

All of the pending claims, i.e., claims 5 and 12-16, were cancelled without prejudice.

New claims 23-84 were added.